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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/630,024	07/31/2000	Kevin L. Farley	2479.2013-000	4041	
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HAMILTON, BROOK, SMITH & REYNOLDS, P.C.			ORGAD	ORGAD, EDAN	
530 VIRGINIA	ROAD				
P.O. BOX 9133 CONCORD, MA 01742-9133			ART UNIT	PAPER NUMBER	
			2618	-	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		09/630,024	FARLEY ET AL.				
		Examiner	Art Unit				
		Edan Orgad	2618				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a solid part of the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	•						
1)⊠	Responsive to communication(s) filed on 09 M	arch 2006.					
2a)⊠	This action is FINAL . 2b) ☐ This	action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)⊠	4)⊠ Claim(s) <u>1-3,5-15,18-23 and 25-31</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	5) Claim(s) is/are allowed.						
6)⊠	Claim(s) 1-3,5-15,18-23 and 25-31 is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/or	r election requirement.					
Applicati	on Papers						
9)□	The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
•	Applicant may not request that any objection to the	•					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date. 5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date <u>3/9/06</u> . 6) Other:							

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DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-15, 18-23 and 25-31 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding claim 30, the claimed invention is directed to non-statutory subject matter, specifically, "an electromagnetic signal encoded to transfer computer program code".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 10-14, 18-20, and 28-31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy et al. (6,141,347) in view of Langlet et al. (5,930,248) and further in view of Emilsson (WO 01 82645).

Consider claim 1, Shaughnessy discloses a method of multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses receiving at a base station processor

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having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses, channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members. Langlet teaches channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the

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system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message. In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

Consider claim 13, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a base station processor having a plurality of wireless channels operable to transmit a wireless message; and a plurality of subscriber access units in communication with receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in

their area). Shaughnessy discloses said base station processor is operable to receive a multicast message and simultaneously transmit said multicast message to at least one of said plurality of subscribers access units via the plurality of wireless channels (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13, see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses one of said plurality of wireless channels dedicated to transmitting multicast messages. Langlet teaches one of said plurality of wireless channels dedicated to transmitting multicast messages (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said plurality of wireless channels dedicated to transmitting multicast messages, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message. In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

Consider claim 29, Shaughnessy discloses a computer program product having computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses a computer program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels and receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses computer program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses computer program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

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Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses one of said wireless channels <u>dedicated to transmitting multicast messages</u>. Langlet teaches the one of said wireless channels <u>dedicated to transmitting multicast messages</u> (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said wireless channels dedicated to transmitting multicast messages, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message. In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

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Consider claim 30, Shaughnessy discloses a computer data signal including computer program code for multicasting messages in a wireless network (see col. 1 lines 9-12, col. 4 lines 62-67, and col. 5 lines 1-21, where Shaughnessy discloses a microprocessor, i.e. program product and code, that performs the method). Shaughnessy discloses program code for receiving a multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels and receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses program code for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a program code for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses <u>channels dedicated to transmitting multicast</u> <u>messages</u>, the same one of said wireless channels used to send said multicast message to said plurality of multicast group members. Langlet teaches <u>channels dedicated to transmitting</u> <u>multicast messages</u>, the same one of said wireless channels used to send said multicast message

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to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have channels dedicated to transmitting multicast messages, the same one of said wireless channels used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message. In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

Consider claim 31, Shaughnessy discloses a system for multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses a means for receiving a

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multicast message addressed to a multicast group at a base station processor having a plurality of wireless channels and receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses a means for determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13). Shaughnessy discloses a means for sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members. Langlet teaches channels dedicated to transmitting multicast messages the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have <u>channels dedicated to transmitting</u>

<u>multicast messages</u> the same one of said wireless channels is used to send said multicast message

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to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message. In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

Consider claims 2, 3, and 14, Shaughnessy discloses receiving said message at each of the plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25). Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels. Langlet teaches the same one of said wireless channels (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages). It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Consider claims 10-12, and 18-20, Shaughnessy discloses scanning the message and parsing a group address in accordance with the group according to a protocol (see col. 1 lines 14-54, col. 3 lines 34-67, and col. 4 lines 1-18).

Consider claim 28, Shaughnessy discloses an Internet connection (see col. 3 lines 34-67).

Claims 5-9, 15, 21-23, and 26-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy and Langlet in view of Emilsson (WO 01 82645) as applied to claims 1, 13, and 29-31, above, and further in view of Pan et al. (6,308,079).

Consider claims 5 and 21-23, Shaughnessy discloses the method and system, as modified by Langlet above. Shaughnessy discloses several talk-groups forming variable sets groups, where the subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Langlet do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups. Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Langlet, and have

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another method of talk-groups with subsets of other groups including subsets such that some are listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

Consider claims 6-9, 15, 26, and 27, the above combination discloses lookup and routing tables.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy and Langlet and Emilsson and Pan, as applied to claim 22, above, and further in view of Raith et al. (6,385,461).

Consider claim 25, Shaughnessy, discloses the method and apparatus, as modified by Langlet and Pan above. Shaughnessy further discloses a page message sent to all the group members (see col. 8 lines 20-25). Shaughnessy, Langlet, and Pan, do not specifically disclose one page use for all members. Raith discloses a one page used for all group members (see col. 4 lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, Langlet and Pan, and use one page, as taught by Raith, thus allowing a method where terminals do not loose their opportunity to join the call, as discussed by Raith (col. 2 lines 5-11).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edan Orgad whose telephone number is 571-272-7884. The examiner can normally be reached on 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Edan Orgad

Primary Patent Examiner Telecommunications.